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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,205	12/31/2003	Alexander Berger	MSFT-2863/306352.1	9206

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EXAMINER

LIE, ANGELA M

ART UNIT	PAPER NUMBER
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2163

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/750,205

Applicant(s)

BERGER ET AL.

Examiner

Angela M. Lie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. **Claims 1-8, 13, 18, 19, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Le (US Publication 2005/0076036).**

As to claim 1, Le discloses a method of sharing database objects comprising: specifying at least one dimension (paragraph 47, i.e. product or time), in a source datastore (Figure 1, element 134) to link to in a target datastore (paragraph 47 and figure 1 element 135, in order to update corresponding data for instance time or number of sold products, the specific information has to be linked or identified so the correct entrance is changed); specifying a persistence model for persisting the target datastore (Figure 3C), wherein the persistence model comprises

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persisting metadata in the target datastore (wherein the aggregate data in the target datastore is considered to be a metadata since it is a data about the data shown in the fact tables, in other words the aggregate data is updated based on the changes in individual entries of the fact tables) in the such that changes to metadata of an object in the source datastore is not updated in the target database until the object data is altered, persisting both metadata and data changes in the target datastore or persisting neither metadata nor data in the target datastore such that any change made to the source datastore is propagated to the target datastore (the table in figure 3E is changed if the data in the fact tables (Figure 3D) is varied); specifying a refresh policy for refreshing information in the target datastore (paragraph 7); and creating the target datastore, wherein the target datastore is a linked object comprising a data cube defined by the at least one specified dimension (paragraphs 12 and 13, wherein aggregate data represents a target datastore comprising dimensions).

As to claim 2, Le discloses a method further comprising selecting at least one group of measures in the source datastore to link to in the target datastore (paragraph 47, i.e. product and time).

As to claim 3, Le discloses a method wherein the source datastore (Figure 1, elements 134) and the target datastore (Figure 1, element 135) are analysis databases (paragraph 5, since data contained in the databases can be analyzed, those databases are considered analysis databases).

As to claim 4, Le discloses a method wherein the source datastore (Figure 1, element 134) and the target datastore (Figure 1, element 135) are OLAP databases (paragraph 5).

As to claim 5, Le discloses a method wherein the persistence model comprises persisting metadata (Figure 3C, elements 350, 352, 354, 356, 358).

As to claim 6, Le discloses a method wherein the persistence model comprises persisting data (Figure 3C, values filling the table 366).

As to claim 7, Le discloses a method wherein the refresh policy comprises refreshing data each time data in the target datastore is queried (paragraph 37, i.e. every time when a user update the source database (querying) the target database is automatically updated or refreshed).

As to claim 8, Le discloses a method wherein the refresh policy comprises refreshing data whenever a specified time interval has passed (paragraph 37, since user enters data at some point of time, the interval between the previous and the most recent update is considered to be equivalent with specified time interval).

As to claim 13, Le discloses a system comprising: a target database, module for creating the target database (Figure 1, element 135), defined by at least one dimension linked (paragraph 37) to a dimension in a source database (Figure 1, elements 134) and at least one measure group linked (Figure 3C, elements 381 and 383) to a measure group in the source database, wherein the persistence model comprises persisting metadata in the target datastore (wherein the aggregate table in the target datastore is considered to be a metadata since it is a data about the data shown in the fact tables, in other words the data in the aggregate table is updated based on the changes in individual entries of the fact tables) in the such that changes to metadata of an object in the source datastore is not updated in the target database until the object data is altered, persisting both metadata and data changes in the target datastore or persisting neither metadata nor data in

the target datastore such that any change made to the source datastore is propagated to the target datastore (the table in figure 3E is changed if the data in the fact tables (Figure 3D) is varied).

As to claim 18, Le discloses a system further comprising an analysis module for specifying a refresh policy for determining when data in the target database is refreshed (i.e. the data in the target database is refreshed every time a user changes the data in the source database, paragraph 9).

As to claim 19, Le discloses a system further comprising an analysis module for specifying the persisting model for determining a portion of the target database to be persisted (paragraph 10).

As to claim 21, Le discloses a system wherein the source database is associated with a first instance (Figure 1, element 100) of an analysis module (paragraph 14, OLAP, the data is summarized, for instance sum sale (Figure 3C, element 383)) and the target database (Figure 1, element 122) is associated with a second instance of an analysis module (since the data is updated in the target database (122) based on the current data in the source (100), the target database is considered a second instance also making use of analytical module i.e. OLAP).

As to claim 22, Le discloses a computer readable storage medium comprising computer executable instructions for: selecting at least one dimension in a source analysis datastore (Figure 1, element 134) to link in a target analysis datastore (Figure 1, element 135); selecting a persistence model for persisting the target analysis datastore (Figure 3C, element 382, wherein the aggregate table represents aggregate data (Figure 1, element 135)), wherein the persistence model comprises persisting metadata in the target datastore (wherein the aggregate table in the target datastore is considered to be a metadata since it is a data about the data shown in the fact

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tables, in other words the data in the aggregate table is updated based on the changes in individual entries of the fact tables) in the such that changes to metadata of an object in the source datastore is not updated in the target database until the object data is altered, persisting both metadata and data changes in the target datastore or persisting neither metadata nor data in the target datastore such that any change made to the source datastore is propagated to the target datastore (the table in figure 3E is changed if the data in the fact tables (Figure 3D) is varied); selecting a refresh policy for refreshing information in the target analysis datastore (figure 4, element 410); and selecting at least one group of measures in a source analysis datastore to link to in the target analysis datastore (paragraph 37, Figure 3C, element 382); and creating the target analysis datastore, wherein the target analysis datastore is a cube defined by the at least one specified dimension (paragraphs 12 and 13, wherein aggregate table represents a target datastore comprising dimensions).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 11, 12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le (US Publication 2005/0076036).**

As to claims 11 and 14, Le teaches all the limitations as disclosed in claims 1 and 13 respectively, however he does not teach dimension in target database that is not a dimension of the source database. It would have been obvious however, to one of the ordinary skill in the art during the time the invention was made to have an additional dimensions in the target database that are not present in the source database because it is a design choice of placing certain dimensions or categories in the specific locations i.e. target or source, wherein the decision of creating certain dimensions is dictated by the intended use. Le teaches additional categories in the source database (Figure 3C) that are not present in the target database (Figure 2B), similarly additional dimensions could have been added to the target database for instance listing the summary or other important facts which could have been calculated based on collected data.

As to claim 12, Le teaches all the limitations as disclosed in claim 1, however he does not explicitly teach the step of specifying a group of measures for the target datastore, wherein the group of measures is not a measure group of the source datastore. It would have been obvious however to one of the ordinary skill in the art during the time the invention was made to have an additional measure group (categories relating to the description of the product) in the target database that are not present in the source database because it is a design choice of placing certain measure groups or categories in the specific locations i.e. target or source, wherein the decision of creating certain measure groups is dictated by the intended use. Le teaches additional categories in the source database (Figure 3C) that are not present in the target database (paragraph 38, aggregated data), similarly additional measure could have been added to the target database for instance listing the summary or other important facts which could have been

calculated based on collected data. Those addition measure groups could be accessed in later time to check specific facts regarding sales or other transactions.

As to claim 15, Le teaches all the limitations as disclosed in claim 13, however he does not explicitly teach a second measure group wherein the second measure group is not a dimension to be linked to a measure group in the source database. It would have been obvious to one of the ordinary skill in the art during the time the invention was made to have a measure group in the source database that are not linked to the second measure group because it is a design choice of placing certain measure groups or categories in the specific locations i.e. target or source and linking them in the predetermined manner, wherein the decision of creating certain links is dictated by the intended use. Le teaches additional categories in the source database (Figure 3C) that are not present in the target database (paragraph 38, aggregated data) and therefore they are not linked together.

As to claims 16 and 17, Le indirectly teaches an analysis module, which specifies one dimension or measure group being linked to in the target (Figure 3D and paragraph 38, aggregated data) for instance company code, brand code or product code, wherein more than one dimension is considered to be a measure group). In order to link the appropriate dimensions in both of the databases, there has to be an analyzing module that would allow matching corresponding criteria.

6. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Le (US Publication 2005/0076036) in the view of Pasumansky et al (US Patent 6477536). Le teaches all the limitations disclosed in claim 20, however he does not teach that the source and target databases reside on two different computers.

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Pasumansky teaches the network comprising the server and client computers wherein the systems share common dimensions (Figure 3). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to have two separate computers wherein one of them would be a source database and the other would be a target database as taught by Pasumansky because in majority of cases the warehouse or the central location holds all the main data in the remote location to the one of the client computer which also holds similar information to the one of the main location. This type of configuration is very useful whenever there are multiple clients that need to obtain similar information from the one centralized unit, holding most up to date data, for instance a warehouse and multiple retailer stores.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le (US Publication 2005/0076036) in the view of Daniel et al (US Patent 6785689).

Le teaches all the limitations disclosed in claim 1, however he does not teach a method of sharing the database comprising a filter which can limit specified data from the target datastore to data of a specified type (or exclude certain data from the access by not selecting it). Daniel teaches a network comprising source and target databases (column 1, lines 61-67) wherein the system comprises a filter which allows to extract the appropriate content from the database (column 10, lines 48-53, wherein filter allows to access the data pertaining to the query and disregard the information which are not pertaining to the desired data type). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to use filter in the database, as

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taught by Daniel, in Le's database network in order to extract specified information from the target database, because this allows to run the system more efficiently, because only certain demanded information could have been extracted instead of entire data, which in result would reduce an access time.

Response to Arguments

8. Applicant's arguments filed November 29, 2006 have been fully considered but they are not persuasive.

9. With respect to the applicant's assertion on page 7, alleging that Le does not disclose or suggest " specifying a persistence model for the target datastore, wherein the persistence model comprises persisting metadata in the target datastore such that changes to metadata of an object in the source datastore are not updated in the target datastore until the object data is altered, persisting both metadata and data changes in the target datastore or persisting neither metadata nor data in the target datastore such that any change made to the source datastore is propagated to the target datastore", the examiner disagrees. According to the definition of a metadata it is a data about data. Further, the aggregation data contained in the target datastore (135) describes or summarizes the data contained in the fact tables. When the fact tables are updated or changed the metadata is also updated in the target datastore. Similarly if the data would not be changed, then there would be no update done to the aggregated data (i.e. metadata in the target datastore).

The Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 6442554 discloses a system and method for generating dependent data wherein the model comprises source and target members, wherein the data between the source and target members is associated in order to match and attach corresponding data.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiry

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Angela M Lie



**ALFORD KINDRED
PRIMARY EXAMINER**